



**REPORTING GUIDELINE:**  
**EXAMPLE FORMAT FOR EXCESSIVE RADIATION DOSE REPORTS**

Rule 250 requires that a written report of excessive radiation dose be sent to the Michigan Department of Licensing and Regulatory Affairs, Radiation Safety Section, P.O. Box 30643, Lansing, MI 48909, within 30 days of the date of occurrence. Rule 216(4) requires that the registrant also provide a report on exposure data to the individual exposed. The report to the individual must be provided no later than the date when the report required by Rule 250 is sent to the Department.

The excessive dose reporting format itemized below can meet the requirements of the Rules. Other formats which meet the requirements are also possible and acceptable.

Each item below should be on a separate line or should constitute a separate paragraph or paragraphs.

1. Date this report prepared.
2. Facility name and address (as it appears on the registration certificate).
3. Date of discovery of excessive dose (e.g., date of receipt of film badge report).
4. Body part affected (e.g., lens of the eye, whole body, etc.).
5. Dosimeter identification data (e.g., film badge number).
6. Time period during which the excessive dose occurred (e.g. first quarter, 2000; March, 2000; etc.). If the time period involved is less than a calendar quarter, also provide a subsequent report to indicate the accumulated quarterly dose received.
7. A narrative description of the radiation dose involved and the method of determining this dose.
8. A description of the levels of radiation involved.
9. A narrative description of the cause of the excessive dose.
10. A narrative detailing corrective action taken or planned to prevent a recurrence.
11. Name and signature of individual preparing this report.

The following three items should appear as a separate page of the report:

12. Name of the individual who received the excessive dose or whose radiation monitoring dosimeter indicated an excessive dose.
13. Date of birth of the individual.
14. Estimate of the extent of radiation dose (e.g., 1500 millirem during the first quarter of 2000).

A copy of the statement page described below must be attached to the report mailed to this Department.

15. A statement dated and signed by the individual who received the excessive dose, indicating that he or she has received a copy of the report, as required by Rule 216(4). This statement should indicate that the individual understands the descriptions and conclusions of the report, although the statement should not require the individual to agree with the descriptions or conclusions.
16. Include verification that the individual has received the following statement along with his or her copy of the excessive dose report: "This report is furnished to you under the provisions of Part 5 of the Michigan Department of Licensing and Regulatory Affairs rules entitled '*Standards for Protection Against Radiation.*' You should preserve this report for future reference."

A listing of applicable Rules for excessive radiation dose reporting is on the backside of this guideline. If additional information is needed, contact the Lansing office of the Radiation Safety Section at (517) 636-6800, or the Detroit district office at (313) 456-4660.

# MICHIGAN'S IONIZING RADIATION RULES GOVERNING REPORTS OF EXCESSIVE RADIATION DOSE

325.5205.

Dose limits.

## Rule 205.

TABLE 1

### Maximum Permissible Dose Equivalent for Occupational Exposure

Dose to the whole body*	1.25 rem per quarter
Skin of whole body	7.5 rems per quarter
Hands	18.75 rems per quarter
Fertile women (with respect to fetus)	0.5 rem in gestation period

### Maximum Permissible Dose Equivalent for Non-Occupational Exposure

Individual	0.5 rem in any one year
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### Population Dose Limits

Genetic	0.17 rem average per year
Somatic	0.17 rem average per year

\*If the dose distribution is not uniform the limiting dose shall be the highest dose received by any of the critical organs specified in subrule (5) of rule 203.

## R325.5216. Notifications and reports to individuals.

**Rule 216.** (1) Radiation exposure data for an individual and the results of any measurements, analyses, and calculations of radioactive material deposited or retained in the body of an individual shall be reported to the individual as specified in this rule. The information reported shall include data and results obtained pursuant to department rules or orders, or license or registration conditions, as shown in records maintained by the licensee or registrant pursuant to department rules. Each notification and report shall:

- Be in writing.
- Include appropriate identifying data such as the name of the licensee or registrant, the name of the individual, and the individual's social security number.
- Include the individual's exposure information.
- Contain the following statement:  
"This report is furnished to you under the provisions of part 5 of the Michigan Department of Public Health rules entitled 'Standards for Protection Against Radiation'. You should preserve this report for future reference."

(2) At the request of any worker, employed by or associated with him, a licensee or registrant shall advise the worker annually of the worker's exposure to radiation or radioactive material as shown in records maintained by the licensee or registrant pursuant to rule 245.

(3) At the request of a worker formerly engaged in work controlled by the licensee or the registrant, a licensee or registrant shall furnish to the worker a report of the worker's exposure to radiation or radioactive material. The report shall:

- Be furnished within 30 days from the time the request is made, or within 30 days after the exposure of the individual has been determined by the licensee or registrant, whichever is later.
- Cover, within the period of time specified in the request, each calendar quarter in which the worker's activities involved exposure to radiation from radioactive material licensed by, or radiation machines registered with the department.
- Include the dates and locations of work under the license or registration certificate in which the worker participated during this period.

(4) When a licensee or registrant is required pursuant to rule 250 to report to the department any exposure of an individual to radiation or radioactive material, the licensee or the registrant shall also provide the individual a report on his exposure data included therein. Such reports shall be transmitted at a time not later than the transmittal to the department.

## R325.5247. Notification of incidents.

**Rule 247.** (1) A licensee or registrant shall immediately notify the department by telephone and telegraph of any incident involving any source of radiation possessed by him and which may have caused or threatens to cause any of the following:

- A dose to the whole body of any individual of 25 rems or more of radiation; a dose to the skin of the whole body of any individual of 150 rems or more of radiation; or a dose to the feet, ankles, hands or forearms of any individual of 375 rems or more of radiation.
- The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limits specified for such materials in table II of rules 261 to 269.

- A loss of 1 working week or more of the operation of any facilities affected due to contamination or other potential hazard from radioactive material.
- Damage to property in excess of \$100,000.
- Accidental administration of a radiopharmaceutical to a human patient in excess of the quantity established as appropriate for the procedure at hand.
- Accidental administration of a radiopharmaceutical to a human patient in chemical form different from that established as appropriate for the procedure at hand.

(2) A licensee or registrant shall within 24 hours notify the department by telephone and telegraph of any incident involving any source of radiation possessed by him and which may have caused or threatens to cause any of the following:

- A dose to the whole body of any individual of 5 rems or more of radiation; a dose to the skin of the whole body of any individual of 30 rems or more of radiation; or a dose to the feet, ankles, hands or forearms of 75 rems or more of radiation.
- The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 500 times the limits specified for such materials in table II of rules 261 to 269.
- A loss of 1 day or more of the operation of any facilities affected or damage to property in excess of \$1,000 due to contamination or other potential hazard from radioactive material.

(3) A report filed with the department pursuant to this rule shall be prepared in such a manner that names of individuals who have received exposure to radiation shall be stated in a separate part of the report.

[Note: The requirements of this rule that pertain to radioactive material licensing or compliance are under the purview of the Michigan Department of Environmental Quality.]

## R325.5250. Reports of overdose and excessive levels and concentrations.

**Rule 250.** (1) In addition to any notification required by rule 247 a licensee or registrant shall report in writing within 30 days to the department:

- Each radiation dose received by an individual or concentrations of radioactive material in excess of any applicable limit as set forth in this part or as otherwise approved by the department.
- Each incident for which notification is required by rule 247.
- Levels of radiation or concentrations of radioactive material (not involving excessive exposure of any individual) in an unrestricted area in excess of 10 times any applicable limit as set forth in this part or as otherwise approved by the department.

(2) A report required in subrule (1) shall describe the extent of radiation dose received by individuals or exposure to radioactive material, including estimates of each individual's dose as required by subrule (3); levels of radiation and concentrations of radioactive material involved; the cause of exposure, levels or concentrations; and corrective steps taken or planned to assure against a recurrence.

(3) A report filed with the department pursuant to subrule (1) shall include for each individual exposed the name, social security number, and date of birth, and an estimate of the individual's dose. The report shall be prepared so that this information is stated in a separate part of the report.

[Note: Because of privacy concerns, the social security number of the exposed individual should not be included with the incident report]